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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
. 10/825,700	04/16/2004	Christopher James Elphinstone Chandler	5760-20800/VRTS0578	9182
35690 75	590 10/23/2006		EXAMINER	
MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C. 700 LAVACA, SUITE 800			COUGHLAN, PETER D	
	AUSTIN, TX 78701			PAPER NUMBER .
		•	2129	
			DATE MAILED: 10/23/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Office Action Summan	10/825,700	CHANDLER, CHRISTOPHER JAMES ELPHINSTONE					
Office Action Summary	Examiner	Art Unit					
	Peter Coughlan	2129					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	I. lety filed the mailing date of this communication. O (35 U.S.C. § 133).					
Status							
Responsive to communication(s) filed on <u>28 July 2006</u> .							
,_	, 						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>1-32</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-32</u> is/are rejected.	6)⊠ Claim(s) <u>1-32</u> is/are rejected.						
7) Claim(s) is/are objected to.		·					
8) Claim(s) are subject to restriction and/or	r election requirement.						
Application Papers							
9) The specification is objected to by the Examine	r.						
10)⊠ The drawing(s) filed on <u>16 April 2004</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
	٠.						
Attachment(s)							
1) Notice of References Cited (PTO-892)	4) Interview Summary						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal P						
Paper No(s)/Mail Date <u>7/28/06</u> . 6) Other:							

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Detailed Action

1. This office action is in response to an AMENDMENT entered July 28, 2006 for the patent application 10/825700 filed on April 16, 2004.

2. The First Office Action of April 25, 2006 is fully incorporated into this Final Office Action by reference.

Status of Claims

3. Claims 1-32 are pending.

Claim Rejections - 35 USC § 101

Claims 1-32 are rejected under 35 U.S.C. 101 for nonstatutory subject matter. The computer system must set forth a practical application of that § 101 judicial exception to produce a real-world result. Benson, 409 U.S. at 71-72, 175 USPQ at 676-77. The invention is ineligible because it has not been limited to a substantial practical application. The terms 'generate an answer', 'confidence level' and 'policy evaluation' are vague and can fall outside a real world function and or purpose. 'Confidence level'

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is nothing more than a number on a scale and 'generate an answer and 'policy evaluation' can be almost anything.

In determining whether the claim is for a "practical application," the focus is not on whether the steps taken to achieve a particular result are useful, tangible and concrete, but rather that the <u>final result</u> achieved by the claimed invention is "useful, tangible and concrete." If the claim is directed to a practical application of the § 101 judicial exception producing a result tied to the physical world that does not preempt the judicial exception, then the claim meets the statutory requirement of 35 U.S.C. § 101.

The phrase 'policy evaluation', is not clear in its purpose or scope. Is the 'policy evaluation' a set of instructions for a repair or just a value indicating a status condition of a IT network? The system must have a real world purpose.

The invention must be for a practical application and either:

- 1) specify transforming (physical thing) or
- 2) have the FINAL RESULT (not the steps) achieve or produce a useful (specific, substantial, AND credible), concrete (substantially repeatable/ non-unpredictable), AND tangible (real world/ non-abstract) result.

A claim that is so broad that it reads on both statutory and non-statutory subject matter, must be amended, and if the specification discloses a practical application but the claim is broader than the disclosure such that it does not require the practical application, then the claim must be amended.

Claims that only recite the generation of 'confidence level', 'to generate an answer' and 'policy evaluation' are not statutory.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5, 8-12, 14-19, 21-24, 26-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carter et al in view of Janssens, and further in view of Smith et al. (U. S. Patent Publication 20030051026, referred to as **Carter**; 'Inequalities in Fuzzy Probability Calculus', referred to as **Janssens**; U. S. Patent Publication 20030172133, referred to as **Smith**)

Claim 1.

Carter teaches a processor (Carter, ¶0588); and a memory comprising program instructions, wherein the program instructions are executable by the processor to implement a policy evaluation mechanism configured to evaluate policies to provide

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automated computer system administration in an information technology (IT) environment, wherein, to evaluate policies, the policy evaluation mechanism is configured to (Carter, abstract; 'Policy evaluation mechanism', 'automated computer system', 'information technology environment' of applicant is equivalent to 'monitors', 'autonomously alters', 'network communications' of Carter.): access a policy and information relevant to an evaluation of the policy. (Carter, ¶0228;'Policy', and 'Information relevant' of applicant is equivalent to 'Network Surveillance and Security Systems' and 'intrusion information' of Carter.)

Carter does not teach and evaluate the policy according to the information using two or more inference techniques.

Janssens teaches and evaluate the policy according to the information using two or more inference techniques. (Janssens, abstract, p211:11-15; 'Two or more inference techniques' of applicant is equivalent to 'fuzzy logic' and 'fuzzy probability calculus' of Janssens.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the teachings of Carter by using two separate technique for evaluation as taught by Janssens to evaluate the policy according to the information using two or more inference techniques.

For the purpose of having one technique overcome the shortcoming of the second technique and visa-versa.

Carter and Janssens do not teach to generate an answer and a confidence level for the policy evaluation.

Smith teaches to generate an answer and a confidence level for the policy evaluation (**Smith**, abstract). It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify combined teachings of Carter and Janssens by generating a confidence value for a given solution as taught by Smith to generate an answer and a confidence level for the policy evaluation.

For the purpose of a indicator for the automated system or an operator.

Claims 2, 17.

Carter does not teach wherein the inference techniques include one or more of probability calculus, fuzzy logic and evidential logic.

Janssens teaches wherein the inference techniques include one or more of probability calculus, fuzzy logic and evidential logic. (Janssens, abstract, p211:11-15; 'Two or more inference techniques' of applicant is equivalent to 'probability calculus' and 'fuzzy logic' of Janssens.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the teachings of Carter by using specified inference techniques as taught by Janssens to have inference techniques include one or more of probability calculus, fuzzy logic and evidential logic.

For the purpose of having one technique overcome the shortcoming of the second technique and visa-versa.

Claims 3, 10.

Carter and Janssens do not teach the policy evaluation mechanism is further configured to provide the answer and the confidence level to a user of the system.

Smith teaches the policy evaluation mechanism is further configured to provide the answer and the confidence level to a user of the system. (Smith, abstract) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify combined teachings of Carter and Janssens by displaying to the operator the confidence level of a answer as taught by Smith to have the policy evaluation mechanism is further configured to provide the answer and the confidence level to a user of the system.

For the purpose of having the operator the ability to oversee the automated system.

Claims 4, 11, 18, 23

Carter teaches wherein the policy evaluation mechanism is further configured to initiate a process automatically in the IT environment if the answer and the confidence level for the policy evaluation indicate that the process can be performed according to a predetermined confidence threshold. (Carter, ¶0791)

Claim 27.

The computer accessible medium as recited in claim 26 wherein the program instructions are configured (Carter, ¶0147) to further implement automatically in the IT environment if the answer and the confidence level for the policy evaluation indicate that

the process can be performed according to a predetermined confidence threshold. (Carter, ¶0791)

Claim 5.

Carter teaches wherein the policy evaluation mechanism is configured to evaluate policies to provide automated administration for one or more of a storage management mechanism and an application management mechanism. (Carter, ¶0228 and 0231)

Claim 8.

Carter teaches and means for providing automated computer system administration in an information technology (IT) environment according to the policy evaluations. (Carter, abstract; 'automated computer system', 'information technology environment', 'policy evaluation' of applicant is equivalent to 'autonomously alters', 'network communications', 'monitors' of Carter.)

Carter does not teach the means for evaluating policies using two or more inference techniques.

Janssens teaches means for evaluating policies using two or more inference techniques (Janssens, abstract, p211:11-15; 'Two or more inference techniques' of applicant is equivalent to 'fuzzy logic' and 'fuzzy probability calculus' of Janssens.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the teachings of Carter by using two seperate inference

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engines as taught by Janssens to have means for evaluating policies using two or more inference techniques

For the purpose of having one technique overcome the shortcoming of the second technique and visa-versa.

Carter and Janssens do not teach to generate an answer and a confidence level for the policy evaluations.

Smith teaches to generate an answer and a confidence level for the policy evaluations. (Smith, abstract) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify combined teachings of Carter and Janssens by correlating a value to a solution for a given problem as taught by Smith to generate an answer and a confidence level for the policy evaluations.

For the purpose of using the value as a indicator for possible reactions.

Claim 9.

Carter teaches evaluating policies to provide automated computer system administration in an information technology (IT) environment, wherein said evaluating policies comprises (Carter, abstract; 'Evaluating policies', 'automated computer system', 'information technology environment' of applicant is equivalent to 'monitors', 'autonomously alters', 'network communications'): accessing a policy and information relevant to an evaluation of the policy. (Carter, ¶0228; 'Policy', and 'Information relevant' of applicant is equivalent to 'Network Surveillance and Security Systems' and 'intrusion information' of Carter.)

Carter does not teach evaluating the policy according to the information using two or more inference techniques including one or more of probability calculus, fuzzy logic and evidential logic to generate an answer.

Janssens teaches evaluating the policy according to the information using two or more inference techniques including one or more of probability calculus, fuzzy logic and evidential logic to generate an answer. (Janssens, abstract, p211:11-15; 'Two or more inference techniques' of applicant is equivalent to 'fuzzy logic' and 'fuzzy probability calculus' of Janssens.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the teachings of Carter by specifying what inference techniques are required as taught by Janssens to evaluate the policy according to the information using two or more inference techniques including one or more of fuzzy probability calculus, fuzzy logic and evidential logic to generate an answer

For the purpose of having one technique overcome the shortcoming of the second technique and visa-versa.

Carter and Janssens do not teach and a confidence level for the policy evaluation.

Smith teaches a confidence level for the policy evaluation (**Smith**, abstract). It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify combined teachings of Carter and Janssens by generating a correlating value for a solution for a given problem as taught by Smith to have a confidence level for the policy evaluation.

For the purpose of using the value as a indicator or flag for future actions.

Claims 12, 15, 19, 24

Carter teaches wherein said automated computer system administration in the IT environment (Carter, abstract) comprises automated administration of one or more of a storage management mechanism and an application management mechanism.

(Carter, ¶0218; 'Storage management mechanism' and 'application management mechanism' of applicant is equivalent to 'specialized database algorithm' and 'expert system security intelligence layer' of Carter.)

Claim 28

Carter teaches computer accessible medium (Carter, ¶0147) as recited in claim 26, wherein said automated computer system administration in the IT environment (Carter, abstract) comprises automated administration of one or more of a storage management mechanism and an application management mechanism. (Carter, ¶0218; 'Storage management mechanism' and 'application management mechanism' of applicant is equivalent to 'specialized database algorithm' and 'expert system security intelligence layer' of Carter.)

Claim 14.

Carter teaches evaluating policies to provide automated computer system , administration in an information technology (IT) environment, wherein said evaluating

policies comprises (Carter, abstract; 'Evaluating policies', 'automated computer system', 'information technology environment' of applicant is equivalent to 'monitors', 'autonomously alters', 'network communications'): accessing a policy and information relevant to an evaluation of the policy. (Carter, ¶0228;'Policy', and 'Information relevant' of applicant is equivalent to 'Network Surveillance and Security Systems' and 'intrusion information' of Carter.)

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Carter does not teach evaluating the policy according to the information using two or more inference techniques including one or more of probability calculus, fuzzy logic and evidential logic to generate an answer.

Janssens teaches evaluating the policy according to the information using two or more inference techniques including one or more of probability calculus, fuzzy logic and evidential logic to generate an answer (Janssens, abstract, p211:11-15; 'Two or more inference techniques' of applicant is equivalent to 'probability calculus' and ;fuzzy logic' of Janssens.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the teachings of Carter by specifying specific inference techniques as taught by Janssens to evaluate the policy according to the information using two or more inference techniques including one or more of probability calculus, fuzzy logic and evidential logic to generate an answer.

For the purpose of having one technique overcome the shortcoming of the second technique and visa-versa.

Carter and Janssens do not teach and a confidence level for the policy evaluation.

Smith teaches a confidence level for the policy evaluation. (**Smith**, abstract) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify combined teachings of Carter and Janssens by associating a confidence value for a solution for a given problem as taught by Smith to have a confidence level for the policy evaluation.

For the purpose of using the value as a flag or indicator for an future action.

Carter teaches automatically initiating a process in the IT environment if the answer and the confidence level for the policy evaluation indicate that the process can be performed according to a predetermined confidence threshold. (Carter, ¶0239; 'Automatically initiating' of applicant is equivalent to 'self-initiated' of Carter.)

Claim 16.

Carter teaches a processor (**Carter**, ¶0588); and a memory comprising program instructions, wherein the program instructions are executable by the processor to implement a self-tuning policy evaluation mechanism configured to evaluate policies to provide automated computer system administration in an information technology (IT) environment, wherein the self-tuning policy evaluation mechanism is configured to (**Carter**, Abstract; 'Self-tuning policy', 'evaluate policies', 'automated computer system administration', 'information technology environment' of applicant is equivalent to 'autonomously alters', 'monitors', 'updates autonomously', 'network communications' of Carter.)

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Carter does not teach evaluate a policy according to information relevant to an evaluation of the policy using two or more inference techniques to generate results including an answer.

Janssens teaches evaluate a policy according to information relevant to an evaluation of the policy using two or more inference techniques to generate results including an answer (Janssens, abstract, p211:11-15; 'Two or more inference techniques' of applicant is equivalent to 'probability calculus' and ;fuzzy logic' of Janssens.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the teachings of Carter by indicating specific inference techniques as taught by Janssens to evaluate a policy according to information relevant to an evaluation of the policy using two or more inference techniques to generate results including an answer.

For the purpose of having one technique overcome the shortcoming of the second technique and visa-versa.

Carter and Janssens do not teach a confidence level for the policy evaluation.

Smith teaches a confidence level for the policy evaluation. (**Smith**, abstract) It would have been obvious to a person having ordinary skill in the art at the time ofapplicant's invention to modify combined teachings of Carter and Janssens by generating a value and correlate to a solution for a given problem as taught by Smith to have a confidence level for the policy evaluation.

For the purpose of using that value as a flag or a indicator for future actions.

Carter teaches storing the results of the policy evaluation in a database of historical information about the policy (Carter, ¶0006; 'Policy evaluation in a database of historical information' of applicant is equivalent to 'determine the correct response' of it's 'knowledge base' of Carter.); and access the historical information stored in the database in subsequent evaluations of the policy to generate more accurate results.

(Carter, ¶0006; 'Policy to generate more accurate results' of applicant is equivalent to 'drawing comparisons to prior occurrences to infer appropriate countermeasures' of Carter.)

Claim 21.

Carter does not teach means for evaluating policies using two or more inference techniques to generate results including an answer.

Janssens teaches means for evaluating policies using two or more inference techniques to generate results including an answer. (Janssens, abstract, p211:11-15; 'Two or more inference techniques' of applicant is equivalent to 'probability calculus' and ;fuzzy logic' of Janssens.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the teachings of Carter by indicating specific inference techniques as taught by Janssens to teach means for evaluating policies using two or more inference techniques to generate results including an answer.

For the purpose of having one technique overcome the shortcoming of the second technique and visa-versa.

Carter and Janssens do not teach and a confidence level for the policy evaluations.

Smith teaches a confidence level for the policy evaluations. (**Smith**, abstract) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify combined teachings of Carter and Janssens by correlating a generated value for a solution for a given problem as taught by Smith to have a confidence level for the policy evaluations.

For the purpose of using the value as a flag or indicator for future action by the system or operator.

Carter teaches means for storing the results of the policy evaluations as historical information about the policy evaluations (**Carter**, ¶0006; 'Policy evaluation in a database of historical information' of applicant is equivalent to 'determine the correct response' of it's 'knowledge base' of Carter.); and means for applying the historical information in subsequent evaluations of the policy to generate more accurate results. (**Carter**, ¶0006; 'Policy to generate more accurate results' of applicant is equivalent to 'drawing comparisons to prior occurrences to infer appropriate countermeasures' of Carter.)

Claim 22.

Carter teaches evaluating policies to provide automated computer system administration in an information technology (IT) environment, wherein said evaluating policies comprises. (Carter, abstract; 'Evaluating policies', 'automated computer

system administration', 'information technology (IT) environment' of applicant is equivalent to 'monitors', 'updates autonomously', 'network communications' of Carter.)

Carter does not teach evaluating a policy according to information relevant to an evaluation of the policy using two or more inference techniques including one or more of probability calculus, fuzzy logic and evidential logic to generate results including an answer.

Janssens teaches evaluating a policy according to information relevant to an evaluation of the policy using two or more inference techniques including one or more of probability calculus, fuzzy logic and evidential logic to generate results including an answer. (Janssens, abstract, p211:11-15; 'Two or more inference techniques' of applicant is equivalent to 'probability calculus' and ;fuzzy logic' of Janssens.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the teachings of Carter by specifying specific inference techniques as taught by Janssens to evaluate a policy according to information relevant to an evaluation of the policy using two or more inference techniques including one or more of probability calculus, fuzzy logic and evidential logic to generate results including an answer.

For the purpose of having one technique overcome the shortcoming of the second technique and visa-versa.

Carter and Janssens do not teach a confidence level for the policy evaluation.

Smith teaches a confidence level for the policy evaluation. (Smith, abstract) It would have been obvious to a person having ordinary skill in the art at the time of applicant's

invention to modify combined teachings of Carter and Janssens by generating a value and correlate it to a solution for a given problem as taught by Smith to have a confidence level for the policy evaluation.

For the purpose of using the value as a flag or indicator for future actions.

Carter teaches storing the results of the policy evaluation in a database of historical information about the policy (Carter, ¶0006; 'Policy evaluation in a database of historical information' of applicant is equivalent to 'determine the correct response' of it's 'knowledge base' of Carter.); and accessing the historical information stored in the database in subsequent evaluations of the policy to generate more accurate results. (Carter, ¶0006; 'Policy to generate more accurate results' of applicant is equivalent to 'drawing comparisons to prior occurrences to infer appropriate countermeasures' of Carter.)

Claim 26.

Carter does not teach evaluating a policy according to information relevant to an evaluation of the policy using two or more inference techniques including one or more of probability calculus, fuzzy logic and evidential logic to generate results including an answer.

Janssens teaches evaluating a policy according to information relevant to an evaluation of the policy using two or more inference techniques including one or more of probability calculus, fuzzy logic and evidential logic to generate results including an answer. (Janssens, abstract, p211:11-15; 'Two or more inference techniques' of

applicant is equivalent to 'probability calculus' and ;fuzzy logic' of Janssens.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the teachings of Carter by specifying specific inference techniques as taught by Janssens to evaluate a policy according to information relevant to an evaluation of the policy using two or more inference techniques including one or more of probability calculus, fuzzy logic and evidential logic to generate results including an answer.

For the purpose of having one technique overcome the shortcoming of the second technique and visa-versa.

Carter and Janssens do not teach a confidence level for the policy evaluation.

Smith teaches a confidence level for the policy evaluation. (**Smith**, abstract) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify) combined teachings of Carter and Janssens by generating a value the correlates to a solution for a given problem as taught by Smith to have a confidence level for the policy evaluation.

For the purpose of using the value as a indicator or a flag for future actions.

Carter teaches storing the results of the policy evaluation in a database of historical information about the policy (Carter, ¶0006; 'Policy evaluation in a database of historical information' of applicant is equivalent to 'determine the correct response' of it's 'knowledge base' of Carter.); and accessing the historical information stored in the database in subsequent evaluations of the policy to generate more accurate results.

(Carter, ¶0006; 'Policy to generate more accurate results' of applicant is equivalent to

'drawing comparisons to prior occurrences to infer appropriate countermeasures' of Carter.)

Claim 29.

Carter teaches a plurality of decision engines comprising (Carter, ¶0369; 'Plurality of decision engines' of applicant is equivalent to 'genetic programming algorithms' of Carter. Genetic algorithms make decisions concerning 'survival of the fittest', 'crossover' and 'mutation'.); one or more local decision engines each configured to provide automated administration for one component in the IT environment according to one or more local policies for the component (Carter, abstract; 'Automated administration', 'IT environment', 'local policies' of applicant is equivalent to 'updates autonomously', 'network communications', 'monitors' of Carter.); and a central decision engine configured to provide automated administration of the IT environment according to one or more high-level policies for the IT environment. (Carter, ¶0880)

Carter does not teach wherein each of the decision engines is configured to:
evaluate a policy associated with the decision engine according to information relevant
to an evaluation of the policies using two or more inference techniques including
probability calculus, fuzzy logic and evidential logic to generate results including an
answer.

Janssens teaches wherein each of the decision engines is configured to:

evaluate a policy associated with the decision engine according to information relevant

to an evaluation of the policies using two or more inference techniques including probability calculus, fuzzy logic and evidential logic to generate results including an answer. (Janssens, abstract, p211:11-15; 'Two or more inference techniques' of applicant is equivalent to 'fuzzy logic' and 'fuzzy probability calculus' of Janssens.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the teachings of Carter by specifying specific inference techniques as taught by Janssens to have wherein each of the decision engines is configured to: evaluate a policy associated with the decision engine according to information relevant to an evaluation of the policies using two or more inference techniques including probability calculus, fuzzy logic and evidential logic to generate results including an answer.

For the purpose of having one technique overcome the shortcoming of the second technique and visa-versa.

Carter and Janssens do not teach a confidence level for the policy evaluation.

Smith teaches a confidence level for the policy evaluation. (**Smith**, abstract) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify combined teachings of Carter and Janssens by generating a value that correlates to a solution for a given problem as taught by Smith to have a confidence level for the policy evaluation.

Smith teaches a confidence level for the policy evaluation.

For the purpose of using the value as a flag or indicator for future actions.

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Carter teaches automatically initiate a process in the IT environment if the answer and the confidence level for the policy evaluation indicate that the process can be performed according to a predetermined confidence threshold. (Carter, ¶0239; 'Automatically initiating' of applicant is equivalent to 'self-initiated' of Carter.)

Claim 30.

Carter teaches the components include one or more of a storage management mechanism and an application management mechanism. (Carter, ¶0218; 'Storage management mechanism' of applicant is equivalent to 'specialized database algorithm' of Carter.)

Claim 31.

Carter teaches he local decision engines are further configured to provide the results of local policy evaluations to the central decision engine for use in evaluations of the high-level policies for the IT environment. (**Carter**, ¶0371, ¶0372 and Fig. 4 items 428 and 432; 'Local decision engines' of applicant is equivalent to ''machine learning' and 'neural network security algorithms' of Carter.)

Claim 32.

Carter teaches to provide automated administration of the IT environment according to one or more high-level policies for the IT environment, the central

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decision engine is configured to. (**Carter, ¶**0218; The 'expert system security intelligence layer' is a high-level policy for the IT environment.)

Carter does not teach evaluate the high-level policies using two or more inference techniques to generate results including answers.

Janssens teaches evaluate the high-level policies using two or more inference techniques to generate results including answers. (Janssens, abstract, p211:11-15; 'Inference techniques' of applicant is equivalent to 'probability calculus' and fuzzy logic' of Janssens.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the teachings of Carter by specifying specific inference techniques as taught by Janssens to evaluate the high-level policies using two or more inference techniques to generate results including answers.

For the purpose of having one technique overcome the shortcoming of the second technique and visa-versa.

Carter and Janssens do not teach associated confidence levels for the highlevel policy evaluations.

Smith teaches associated confidence levels for the high-level policy evaluations. (Smith, abstract) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify combined teachings of Carter and Janssens by generating a value associated to a solution for a given problem as taught by Smith to associated confidence levels for the high-level policy evaluations.

For the purpose of using the value as a flag or indicator for a future action.

Carter teaches delegate local policies to the one or more local decision engines for evaluation. (Carter, Fig. 3, ¶0371 and ¶0372; The 'event learning and neural artificial intelligence' and 'research functions and acceptance and validation' are two local decision engines for the 'expert system security intelligence layer'.)

Claim Rejections - 35 USC § 103

Claims 6, 7, 13, 20, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Carter, Janssens and Smith, as set forth above, and further in view of Cao ('A Deductive probabilistic and Fuzzy Object-Oriented Database Language', referred to as Cao)

Claim 6.

Carter, Janssens and Smith do not teach wherein the inference techniques are implemented according to an uncertainty logic programming language.

Cao teaches wherein the inference techniques are implemented according to an uncertainty logic programming language. (Cao, abstract; FRIL and FRIL++ are examples of an uncertainty logic programming language.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify combined teachings of Carter, Janssens and Smith by introducing a computer language that lends itself to inference functions as taught by Cao to have the inference techniques are implemented according to an uncertainty logic programming language.

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For the purpose of allowing probabilistic uncertainties and fuzzy sets to be included.

Claims 7, 13, 20, 25.

Carter, Janssens and Smith do not teach wherein the uncertainty logic programming language is one of Fuzzy Relational Inference Language (FRIL) and FRIL++.

Cao teachers wherein the uncertainty logic programming language is one of Fuzzy Relational Inference Language (FRIL) and FRIL++. (Cao, abstract) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify combined teachings of Carter, Janssens and Smith by specifying the computer languages FRIL and FRIL++ as taught by Cao to have the uncertainty logic programming language is one of Fuzzy Relational Inference Language (FRIL) and FRIL++.

For the purpose of needing uncertain class hierarchies thus FRIL++ is used.

Response to Arguments

5. Applicant's arguments filed on July 28, 2006 for claims 1-32 have been fully considered but are not persuasive.

6. In reference to the Applicant's argument:

Section 101 Rejection:

The Examiner rejected claims 1-32 under 35 U.S.C. § 101 for nonstatutory subject matter. Applicant respectfully traverses this rejection for at least the following reasons.

The Examiner argues that the "invention is ineligible because it has not been limited to a substantial practical application", that "the terms `generate an answer', `confidence level', and `policy evaluation' are vague and can fall outside a real world function and or purpose", and that "`confidence level' is nothing more than a number on a scale and `generate an answer' and `policy evaluation' can be almost anything." Applicant traverses the rejection on the grounds that the Examiner has improperly extracted the terms from claim 1 and declared the terms vague in isolation, and has not properly considered the terms in the context of the entire claim.

As to the Examiner's assertion that "policy evaluation' can be almost anything", applicant notes that claim 1 cites a "policy evaluation mechanism configured to evaluate policies to provide automated computer system administration in an information technology (IT) environment." Claim 1 thus clearly discloses policies as policies directed at automated computer system administration in an IT environment. Further, claim 1 cites that, to evaluate policies, the policy evaluation mechanism is configured to "evaluate [a] policy according to... information [relevant to an evaluation of the policy] using two or more inference techniques." Policy evaluation is thus clearly not 'vague', and it is not true that policy evaluation 'can be almost anything', as the word 'policy' in the term 'policy evaluation' is defined in the claim, as is the term 'evaluation'. Claim 1 thus clearly discloses, when read as a whole, that policy evaluation is the evaluation of policies using two or more inference techniques to provide automated computer system administration in an IT environment.

Further, claim 1 discloses a policy evaluation mechanism that is configured to evaluate the policies, and discloses that, to evaluate policies, the policy evaluation is configured to "access a policy and information relevant to an evaluation of the policy; and evaluate the policy according to the information using two or more inference techniques to generate an answer and a confidence level for the policy evaluation."

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Applicant asserts that the policy evaluation mechanism disclosed in claim 1 is thus clearly a substantial practical application.

Furthermore, Applicant's claims do recite a useful, concrete and tangible result. Claim 1 discloses that the evaluation of a policy by the policy evaluation mechanism according to the information [relevant to the evaluation of the policy] using two or more inference techniques generates an answer and a confidence level for the policy evaluation. Examiner asserts that 'answer' and 'confidence level' are 'vague' and can be 'almost anything'. However, it is clear from the context of claim 1 that the answer is an answer to a policy evaluation of a policy directed at automated computer system administration in an IT environment, and that the confidence level is a confidence level for the policy evaluation. Applicant asserts that either one or both of the answer and confidence level for the policy evaluation of a policy directed at automated computer system administration in an IT environment are clearly useful, concrete and tangible results that have useful, concrete and tangible application(s) in automated computer system administration in an IT environment. The answer for the policy evaluation and the confidence level for the policy evaluation are every bit as useful, concrete and tangible as the share price calculated in the claim in State Street Bank & Trust Co. v. Signature Financial Group, Inc., 149 F.3d 1368, 47 USPQ2d 1596 (Fed. Cir. 1998).

Therefore, the § 101 rejection of claim 1 is improper. Applicant respectfully requests removal of the § 101 rejection of claim 1. Similar remarks also apply to claims 8 and 9, as they recite similar limitations using similar language.

Applicant further traverses the § .101 rejection on the grounds that the Examiner has failed to consider every limitation of every rejected claim.

In regard to claim 14, the Examiner has failed to state a prima facie rejection for the claim, which includes limitations not found in claim 1. For example, claim 14 recites automatically initiating a process in the IT environment if the answer and the-confidence level for the policy evaluation indicate that the process can be performed according to a predetermined confidence threshold. Thus, claim 14 clearly recites a tangible, useful result (automatically initiating a process), contrary to the Examiner's assertion. Therefore, the § 101 rejection of claim 14 is improper. Applicant respectfully requests removal of the § 101 rejection of claim 14.

In regard to claim 16, the Examiner has failed to state a prima facie rejection for the claim, which includes limitations not found in claim 1. For example, claim 16 recites a self-tuning policy evaluation mechanism configured to evaluate a policy according to

information relevant to an evaluation of the policy using two or more inference techniques to generate results including an answer and a confidence level for the policy evaluation, store the results of the policy evaluation in a database of historical information about the policy; and access the historical information stored in the database in subsequent evaluations of the policy to generate more accurate results. Thus, claim 16 clearly recites a tangible, useful result (storing results of the policy evaluation for use in subsequent evaluations of the policy to generate more accurate results), contrary to the Examiner's assertion. Therefore, the § 101 rejection of claim 16 is improper. Applicant respectfully requests removal of the § 101 rejection of claim 16. Similar remarks also apply to claims 21, 22, and 26, as they recite similar limitations using similar language.

In regard to claim 29, the Examiner has failed to state a prima facie rejection for the claim, which includes limitations not found in claim 1. For example, claim 29 recites a plurality of decision engines... [each] configured to...evaluate a policy associated with the decision engine...and automatically initiate a process in the IT environment if the answer and the confidence level for thepolicy evaluation indicate that the process can be performed according to a predetermined confidence threshold. Thus, claim 29 clearly recites a tangible, useful result (automatically initiating a process), contrary to the Examiner's assertion. Therefore, the § 101 rejection of claim 29 is improper. Applicant respectfully requests removal of the § 101 rejection of claim 29.

In general, the Examiner has failed to state a prima facie rejection for each rejected claim, including the dependent claims. For example, in regard to claim 4, the claim recites that "the policy evaluation mechanism is further configured to initiate a process automatically in the IT environment if the answer and the confidence level for the policy evaluation indicate that the process can be performed according to a predetermined confidence threshold." Thus, claim 4 clearly recites a tangible, useful result (automatically initiating a process), contrary to the Examiner's assertion. Therefore, the § 101 rejection of claim 4 is improper. Applicant respectfully requests removal of the § 101 rejection of claim 4. Similar remarks also apply to claims 11, 18, 23, and 27 as they recite similar limitations using similar language. The Examiner has failed to consider the specific limitations of each claim. Accordingly, the § 101 rejection of claim 1-32 is improper.

Examiner's response:

Claim 1 states it accesses, evaluates a policy and generates an answer. All three of these processes stay within the boundaries of a system and has no practical application. Claim 8 adds 'providing automated computer system administration' which

is vague and indefinite. For example, a router provides 'automated computer system administration' when forwarding packets. Claims 9, 14 are the same. Claims 16, 21, 22, 26 and 29 store and access historical data which still is within the boundaries of the computer and provide no real world application. A confidence level is nothing more than a value. 'Generate an answer' is not the same as outputting an answer and also it does not state an answer for what problem. 'Policy evaluation' stays within the system. 'Policy evaluation' could be determining if a threshold has been surpassed or consideration of multiple input parameters, thus it is vague. 'Policy evaluation' also stays within the system. "Access a policy and information relevant to an evaluation of the policy; and evaluate the policy according to the information using two or more inference techniques to generate an answer and a confidence level for the policy evaluation", all stay within the system and claims no practical application. "Automatically initiating a process in the IT environment if the answer and theconfidence level for the policy evaluation indicate that the process can be performed according to a predetermined confidence threshold" are processes that remain within

the system and have no real world function. "Self-tuning policy evaluation

real world function. First Office Action stands.

mechanism" is a process that remains within the system and has no real world

function. "Decision engine" is a process that remains within the system and has no

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7. In reference to the Applicant's argument:

Section 103(a) Resection:

The Examiner rejected claims 1-5, 8-12, 14-19, 21-24 and 26-32 under 35 U.S.C. § 103(a) as being unpatentable over Carter et al. (U.S. Publication 2003/0051026) (hereinafter "Carter") in view of Janssens ("Inequalities in Fuzzy Probability Calculus"), and further in view of Smith et al. (U.S. Publication 2003/0172133) (hereinafter "Smith"), and claims 6, 7, 13, 20 and 25 as being unpatentable over Carter, Janssens and Smith and further in view of Cao ("A Deductive Probabilistic and Fuzzy Object-Oriented Database Language"). Applicant respectfully traverses these rejections for at least the reasons below.

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In regard to claim 1, Smith discloses a system that monitors and protects the security of computer networks [and that] uses artificial intelligence, including learning algorithms, neural networks and genetic programming, to learn from security events (Smith, abstract). The Examiner asserts that the term 'policy evaluation mechanism' as disclosed in the claim is equivalent to 'monitors', as disclosed in the abstract of the Carter reference. Applicants traverse this assertion, as 'monitoring...the security of computer networks' is clearly not equivalent to a policy evaluation mechanism as disclosed in claim 1 of the present application. The policy evaluation mechanism is disclosed as a mechanism configured to evaluate policies to provide automated computer system administration in an information technology (IT) environment, and is not disclosed as a system for 'monitoring...the security of computer networks.' Further, the Examiner has simply asserted that the two terms are equivalent, and has not provided any basis for said assertion.

The Examiner further asserts that the term `automated computer system [administration]' as disclosed in the claim is equivalent to `autonomously alters [security policies in response to ongoing events]', as disclosed in the abstract of the Carter reference. Applicant traverse this assertions, as `autonomously alter[ing] [security policies in response to ongoing events]' is clearly not equivalent to automated computer system [administration] as disclosed in claim 1 of the present application. `Automated computer system [administration]' is not described as or limited to `autonomously alter[ing] [security policies in response to ongoing events]'. Further, the Examiner has simply asserted that the two terms are equivalent, and has not provided any basis for said assertion.

The Examiner further asserts that the term `information technology environment' as disclosed in the claim is equivalent to `network communications', as disclosed in the abstract of the Carter-reference. Applicant traverses this assertion. Carter, in the abstract, discloses that "[t]he invention tracks network communication traffic." Later

in the abstract, Carter discloses that "[t]he invention is able to subdivide the network communications...". Clearly, 'network communications' refers to the previously mentioned network communication traffic, i.e., messages or packets on a network. 'Network communication traffic' (messages or packets on a network) is clearly not equivalent to an 'information technology environment' in the context of claim 1. Communications "traffic" on a network is not described anywhere in the art as an 'information technology environment' in which policies are evaluated to provide automated computer system administration. Further, the Examiner has simply asserted that the two terms are equivalent, and has not provided any basis for said assertion.

The Examiner further asserts that Carter teaches program instructions executable by a processor to... access a policy and information relevant to an evaluation of the policy. The Examiner cites paragraph [0228] of the Carter reference in support of this assertion, asserting that 'policy' as disclosed in the claim is equivalent to 'network surveillance and security systems' as disclosed by Carter, and that 'information relevant [to an evaluation of the policy]' as disclosed in the claim is equivalent to 'intrusion information' as disclosed by Carter. Applicant traverse these assertions. In regard to the Examiner's first assertion, Applicant fails to see how 'network surveillance and security systems' could possibly be considered 'equivalent to' a policy to be evaluated to provide automated computer system administration in an IT environment. Clearly, a policy is not a system, and a system is not a policy. In regard to the Examiner's second assertion, 'intrusion information' is nowhere described in Carter as 'information relevant [to an evaluation of a policy]. Again, the two terms are simply not equivalent, contrary to the Examiner's assertion. Further, the Examiner has simply asserted that the above terms are equivalent, and has not provided any basis for said assertion.

From the above, it is clear that the Examiner's assertion that Carter teaches a system similar to the system disclosed in claim 1 of the present application is without factual basis.

Contrary to the Examiner's assertions, the Carter reference does not describe anything about a policy evaluation mechanism configured to evaluate policies to provide automated computer system administration in an IT environment.

Examiner's response:

Carter also evaluates policies in paragraphs, ¶363, ¶382, ¶431, ¶475, ¶478,

¶485, ¶791, ¶1027: 'Security policies' would be a function of 'system administration'

'Autonomously altering' is equivalent to 'automated.' Information technology

environment' is equivalent to `network communications.' Both work on a network and both have communications in at least one direction. Applicant does not state what domain the 'automated computer system administration in an IT environment' falls within. This is within the 35 U.S.C. 101 rejection by not stating the practical application of the invention. First Office Action stands.

8. In reference to the Applicant's argument:

In further regard to claim 1, the Examiner admits that "Carter does not teach and evaluate the policy according to the information using two or more inference techniques." The Examiner goes on to assert that the Janssens reference teaches "and evaluate the policy according to the information using two or more inference techniques", and that "two or more inference techniques of applicant is equivalent to 'probability calculus' and 'fuzzy logic' of Janssens (Janssens, abstract). Applicant traverses this assertion. First, Applicant notes that the Janssens reference, in the abstract, refers to one inference technique (fuzzy probability calculus), not two techniques. This one technique (fuzzy probability calculus) is the subject of the Janssens paper, as is clearly indicated by the Title. Elsewhere, Janssens does mention "other applications of fuzzy logic." However, the Janssens reference, contrary to the Examiner's assertion, is clearly not teaching "two separate techniques", but instead is describing "reformulating [Bell-type] inequalities in the context of fuzzy probability logic." Further, the Janssens reference, contrary to the Examiner's assertion, does not teach or suggest "two separate techniques for evaluation."

Furthermore, contrary to the Examiner's suggestion, nowhere does the Janssens reference teach or suggest anything like evaluating policies to provide automated computer system administration in an IT environment using two or more inference techniques. Nor does Carter, alone or in combination with Janssens, teach or suggest anything like evaluating such policies using two or more inference techniques.

The Examiner asserts that "It would have been obvious to a person having ordinary skill in the art at the time of the applicant's invention to modify the teachings of Carter by using two separate techniques for evaluation as taught by Janssens to evaluate the policy according to the information using two or more inference

techniques." However, Applicant reminds the Examiner that "to support the conclusion that the claimed combination is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed combination or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references..." Ex Parte Clapp, 227 U.S.P.Q. 972, 973 (Bd. Pat. App. & Int'f 1985). Applicants note from the above traversals of the Examiner's rejections that the Examiner has failed to establish that Carter "expressly or impliedly suggests" anything like what is disclosed in claim 1 of the present application, nor has the Examiner done so for the Janssens reference. Further, neither the Carter reference nor the Janssens reference "expressly or impliedly suggest" what the Examiner asserts the references teach. Nor does either reference expressly or impliedly suggest a combination of the two references that would produce anything like what is disclosed in claim 1 of the present application. Nor has the Examiner presented a convincing line of reasoning as to why an artisan would have found the claimed invention to have been obvious in light of the teachings of the references.

In further regard to claim 1, the Examiner correctly admits that "Carter and Janssens do not teach to generate an answer and a confidence level for the policy evaluation." (As neither reference teaches or suggests "policy evaluation" as disclosed in claim 1 of the present application, it is obvious that neither reference would teach generating an answer and a confidence level for the policy evaluation.) The Examiner goes on to assert that "Smith teaches to generate an answer and a confidence level for the policy evaluation", citing the abstract. From the abstract, what the Smith reference teaches is a "helpdesk service" that receives requests for help from users, searches a knowledge base for solutions, and assigns confidence levels to each potential solution found by the search. What Smith teaches is clearly and distinctly different than a policy evaluation mechanism that evaluates policies to provide automated computer system administration in an information technology (IT) environment, and that evaluates a policy according to information relevant to the policy using two or more inference techniques to generate an answer and a confidence level for the policy evaluation, as disclosed in claim 1 of the present application.

The Examiner goes on to assert that "It would have been obvious to a person having ordinary skill in the art at the time of the applicant's invention to modify combined teachings of Carter and Janssens by generating a confidence value for a given solution as taught by Smith to generate an answer and a confidence level for the policy evaluation." Again, as noted above, combining the teachings of Carter and Janssens would not produce what is claimed in claim 1 of the present application, and in any case neither the Janssens reference nor the Carter reference teach or suggest combining the two references, nor has the Examiner presented a convincing line of reasoning as to why an artisan would have found the claimed invention to have been obvious in light of the teachings of the references. Even if the two references were combined, the result would not be what is disclosed in claim 1 of the

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present application. In addition, certainly nowhere do any of the Carter, Janssens, or Smith references teach or suggest combining the three references, nor has the Examiner presented a convincing line of reasoning as to why an artisan would have found the claimed invention to have been obvious in light of the teachings of the three cited references. None of Carter, Janssens, or Smith, alone or in combination, are even remotely relevant to a policy evaluation mechanism configured to evaluate policies to provide automated computer system administration in an information technology (IT) environment, as recited in claim I.

Thus, for at least the reasons presented above, the rejection of claim 1 is not supported by the cited prior art and removal thereof is respectfully requested. Similar remarks as those above regarding claim I also apply to claims 6, 11, 14, 16, 21, 22 and 26.

Examiner's response:

Applicant admits that Janssens mentions both 'fuzzy logic' and 'fuzzy probability calculus' which are two inference techniques. Carter teaches 'automated computer system administration.' In response to Applicant's argument that there is no suggestion to combine the references, the Examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of references. In re Nomiya, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is not what individual references themselves suggest but rather what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. In re

Keller, 648 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Sernaker, 702 F.2d 989, 217
USPQ 1 (Fed. Cir. 1983); In re McLaughlin, 170 USPQ 209 (CCPA 1971). References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. In re Bozek, 163 USPQ 545 (CCPA 1969). First Office Action stands.

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9. In reference to the Applicant's argument:

In regard to claim 29, similar remarks as those above regarding claim 1 also apply. In addition, Applicant notes that nowhere in Carter is the term `decision engine' even mentioned. In Figure 3, cited by the Examiner, Carter, in paragraph [0364], discloses that "FIG. 3 is a schematic depiction of examples of processes within the four layers of the Network Surveillance and Security System 310." Nowhere does Carter disclose that the processes are "decision engines" as recited in claim 29. Therefore, Applicant traverses the Examiner's assertion that Carter teaches or suggests a plurality of decision engines as disclosed in claim 29. Further, paragraph [0880] of Carter simply discloses a "process scheduler", and does not teach or suggest anything like "a central decision engine configured to provide automated administration of the IT environment according to one or more high-level policies for the IT environment." Therefore, Applicant traverses the Examiner's assertion that Carter teaches or suggests a central decision engine as disclosed in claim 29.

Applicant also asserts that numerous ones of the independent and dependent claims recite further distinctions over the cited art. However, since the rejections have been shown to be unsupported for the independent claims, a further discussion of the dependent claims is not necessary at this time.

Examiner's response:

'Plurality of decision engines' of applicant is equivalent to 'genetic programming algorithms' of Carter. Genetic algorithms make decisions concerning 'survival of the fittest', 'crossover' and 'mutation'. (Carter, ¶0369)

Examination Considerations

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- 10. The claims and only the claims form the metes and bounds of the invention. "Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d, 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has the full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.
- 11. Examiner's Notes are provided to assist the applicant to better understand the nature of the prior art, application of such prior art and, as appropriate, to further indicate other prior art that maybe applied in other office actions. Such comments are entirely consistent with the intent and sprit of compact prosecution. However, and unless otherwise stated, the Examiner's Notes are not prior art but link to prior art that one of ordinary skill in the art would find inherently appropriate.
- 12. Examiner's Opinion: Paragraphs 10 and 11 apply. The Examiner has full latitude to interpret each claim in the broadest reasonable sense.

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Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Claims 1-32 are rejected.

Correspondence Information

15. Any inquiry concerning this information or related to the subject disclosure should be directed to the Examiner Peter Coughlan, whose telephone number is (571) 272-5990. The Examiner can be reached on Monday through Friday from 7:15 a.m. to 3:45 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor David Vincent can be reached at (571) 272-3687. Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks,

Washington, D. C. 20231;

Hand delivered to:

Receptionist,

Customer Service Window,

Randolph Building,

401 Dulany Street,

Alexandria, Virginia 22313,

(located on the first floor of the south side of the Randolph Building);

or faxed to:

(571) 273-8300 (for formal communications intended for entry.)

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system: Status information for

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unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have any questions on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free). DAVID VINCENT EXAMINER
SUPERVISORY PATENT EXAMINER

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Peter Coughlan

10/18/2006